

Title: User-Centered Design to Improve Video Device Usage Among Older Rural Veterans

Background/Introduction:

- Rural residing adults >65, experience barriers with telemedicine such as access and usability.
- The Veterans Health Administration (VA) established the Digital Divide program (DD) to provide VA-issued tablets and increased access to internet service for Veterans.
- VA-issued devices ordered via DD include 9-pages of written instructions.

Study Aims:

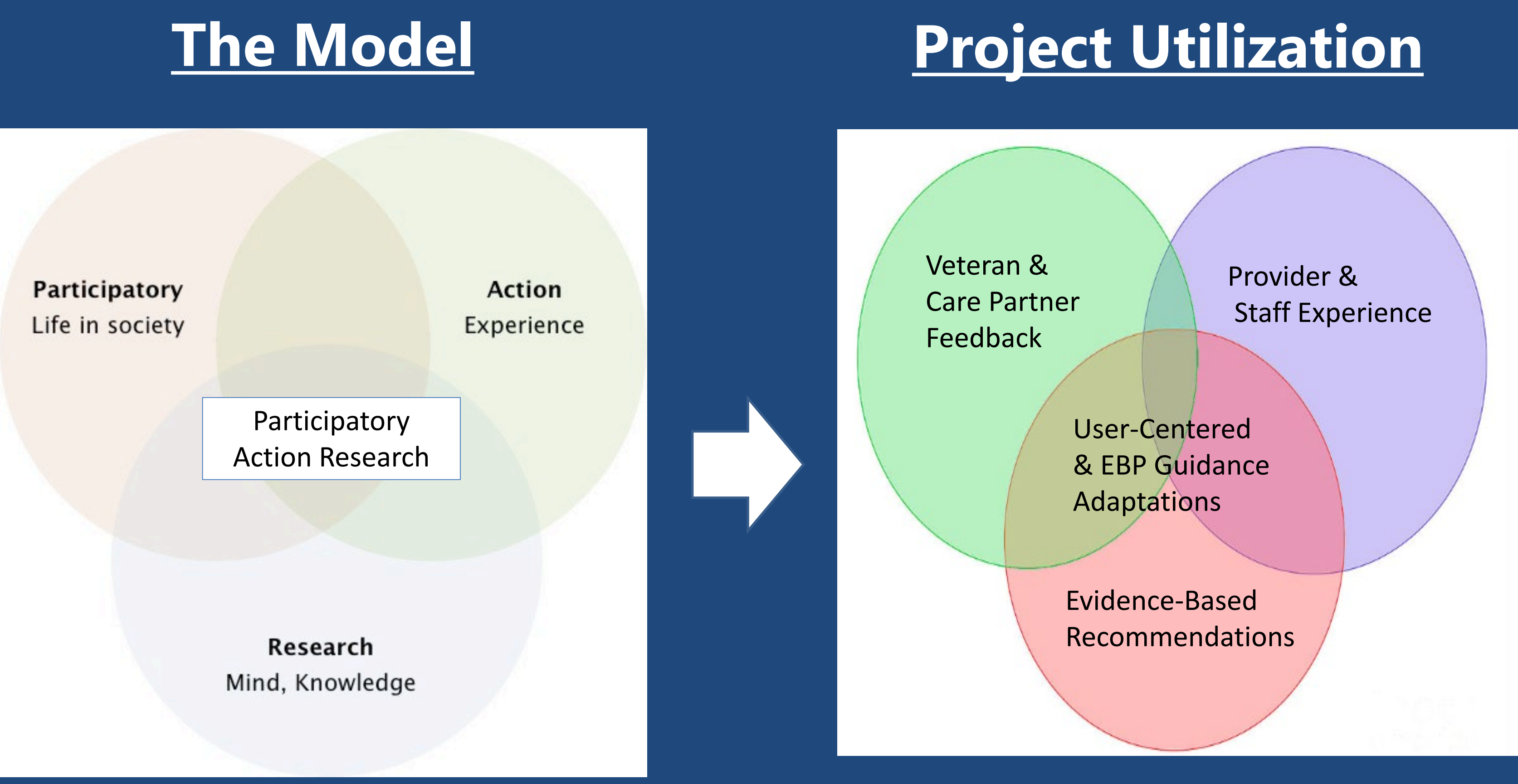
- We used evidence-informed guidelines and user-centered design to improve the usability and experience of written instructions and access to telemedicine for rural, older Veterans receiving a VA-issued tablet.

Methods\*:

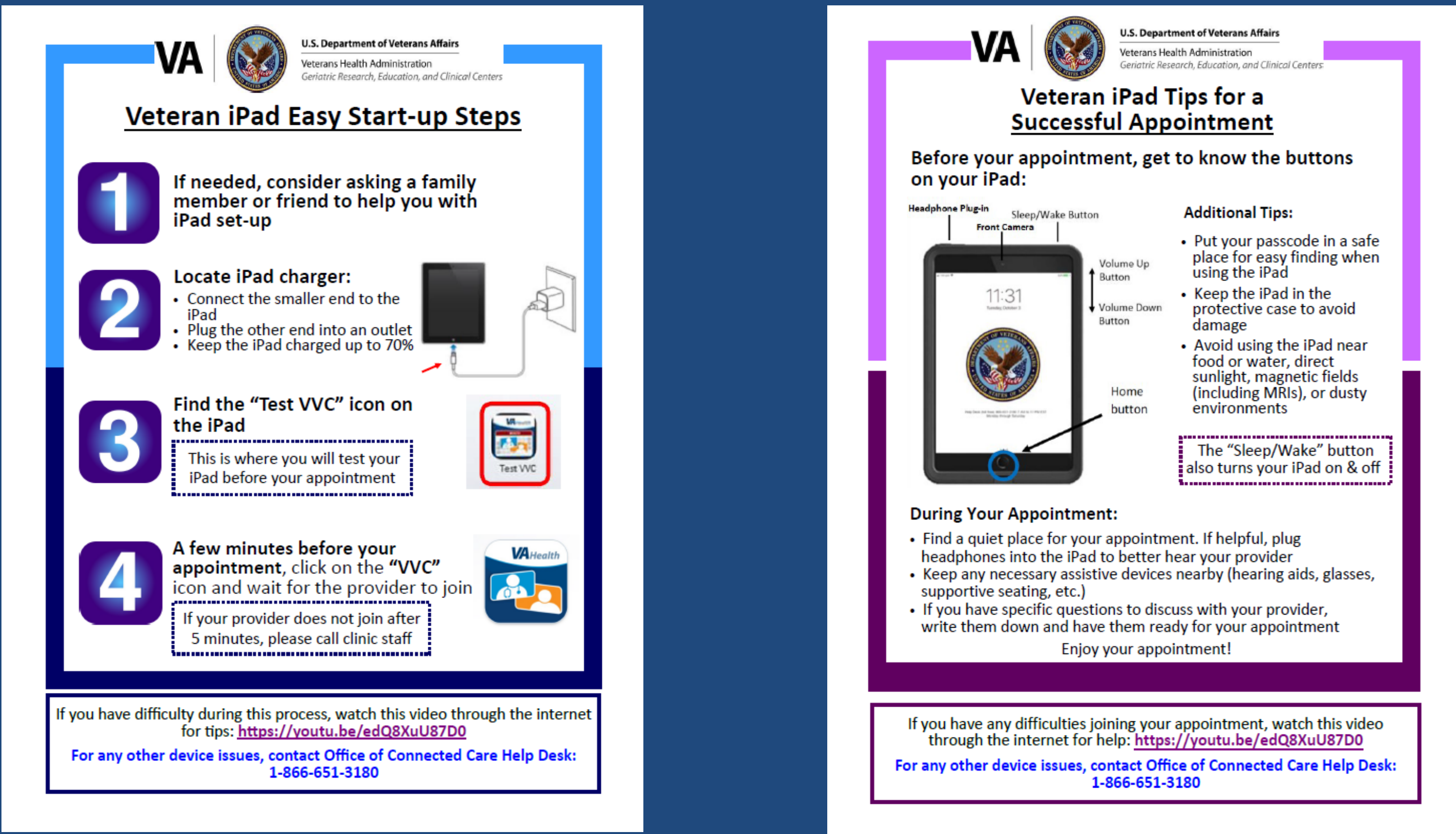
- We conducted a rapid exploratory qualitative evaluation to understand Veteran and care partner experiences setting up VA-issued tablets and logging into their first telemedicine appointment.
- We interviewed key VA personnel and providers involved in ordering and setting up tablets to better understand patient barriers from their perspective.
- Using insights from this feedback and evidence-informed guidelines on educational materials for older adults, we created a one-page Tip Sheet.
- We engaged The Older Veteran Engagement Team (OVET- a group of rural Veterans and care partners who meet to provide feedback on age-related research and clinical projects) to review and provide input on the drafted Tip Sheet to inform final revisions.

\*Pandemic and program limitations pivot – Due to circumstances, planned “user-testing” Veteran interviews pivoted to additional, post-modification, follow-up with OVET group.

User-Centered Design can enhance resources, enabling Rural, Older Veterans to successfully access and utilize telemedicine.



Adaptations Implemented  
9-pages of instructions reduced to 2-  
pages:



Results:

- While some feedback received from VA staff, providers, and OVET group paralleled evidence-based guidance regarding written materials for older adults, unique themes also emerged.\*
  - Provider and VA staff (10 Total, 7 Utilized)
    - Simplify step-by-step instructions
    - Highlight location of device functionality buttons
    - Include instructions to sign on prior to appointment time
    - Safe-keeping of passcode and other important device information
  - OVET: (17 Total, 8 Utilized)
    - Including/enlarging graphics
    - Clarifying abbreviations (or wording)
    - Consolidating further
    - Emphasizing pertinent information further
    - “Successful Appointment” general guidance tip sheet

\*Exemplary, Not an exhaustive list of themes

Implications:

- User-centered design methods assisted with identifying and addressing barriers to telemedicine experienced by older, rural Veterans
- Veterans, care partners, VA staff and providers perceived updated materials as supportive of video device usability and increased satisfaction
- Addressing initial set-up issues with new technology devices or processes can increase user uptake
- Triangulation of evidence-informed guidelines, provider and staff perceptions, and user-centered feedback is a viable option providing valuable information for adapting written materials for increased usability and user experience and satisfaction.

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Reference: Whyte, William F. "Advancing scientific knowledge through participatory action research." Sociological forum. Vol. 4. No. 3. Kluwer Academic Publishers-Plenum Publishers, 1989.

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